

Amendment to the Claims:

The claims under examination in this application, including their current status and changes made in this paper, are respectfully presented.

1 (currently amended). A frequency division duplexed (FDD) radio, comprising:

a duplexer;

a transmitter section coupled to the duplexer, the transmitter section transmitting in a transmit frequency band having a center frequency; ~~and~~

a receiver section coupled to the transmitter section, for receiving a signal at a receive frequency that is different from the transmit band center frequency, the receiver section including a ~~first~~ down conversion section comprising first and second mixers, said first and second mixers receiving a ~~first~~ local oscillator (LO) signal having a frequency equal to the transmit band center frequency or a sub-harmonic thereof;

a first high pass filter having an input coupled to the output of the first mixer, and having an output;

a second high pass filter having an input coupled to the output of the second mixer, and having an output;

a first set of two mixers coupled to the output of the first high pass filter; and

a second set of two mixers coupled to the output of the second high pass filter.

2 (canceled).

3 (canceled).

4 (currently amended). A radio as defined in claim ~~3~~ 1, wherein the first and second high pass filters comprise integrated DC blocking capacitors.

5 (currently amended). A radio as defined in claim ~~3~~ 1, wherein the first and second high pass filters comprise cascaded single pole high pass filters.

6 (canceled).



7 (currently amended). A radio as defined in claim 6 ~~1~~, wherein a first mixer of the first set of two mixers provides an in-phase (I) component at an output and a second mixer of the first set of two mixers provides a quadrature (Q) component at an output,

wherein a first mixer of the second set of two mixers provides an in-phase (I) component at an output and a second mixer of the second set of two mixers provides a quadrature (Q) component at an output;

and further comprising:

a first adder having a first input for receiving the output of the second mixer of the first set of two mixers, and a second input for receiving the output of the first mixer of the second set of two mixers, said first adder having an output for providing an in-phase component base band signal (B.B.I.); and

a second adder having a first input for receiving the output of the first mixer of the first set of two mixers, and a second input for receiving the output of the second mixer of the second set of two mixers, said second adder having an output for providing a quadrature component base band signal (B.B.Q.).

8 (canceled).

9 (canceled)

10 (currently amended). A method as defined in claim 9 ~~14~~, wherein the high-pass filtering step comprises using one or more DC blocking capacitors to filter the ~~output of the first down-conversion section~~ down-converted receive signal.

11 (currently amended). A method as defined in claim 9 ~~14~~, wherein the filtering step comprises using one or more cascaded single pole high pass filters to filter the ~~output of the first down-conversion section~~ down-converted receive signal.

12 (canceled).

13 (currently amended). A radio as defined in claim 1, ~~further comprising: a~~ wherein the first high pass filter coupled to the output of the first mixer, for passing passes frequencies



including an intermediate frequency corresponding to a difference between the center frequency of the receiver section and the transmit band center frequency;

~~a and wherein the second high pass filter coupled to the output of the second mixer, for passing passes~~ frequencies including an intermediate frequency corresponding to a difference between the center frequency of the receiver section and the transmit band center frequency ~~at which the transmitter section transmits.~~

14 (original). A method of operating a receiver in an FDD radio to remove, from a desired receive signal, interference caused by a transmitter transmitting at a transmit center frequency, the desired receive signal having a receive center frequency that is different from the transmit center frequency, comprising the steps of:

mixing the receive signal with a local oscillator frequency to provide a down-converted receive signal, the local oscillator frequency equal to the transmit center frequency or a sub-harmonic thereof;

high-pass filtering the down-converted receive signal; and

converting the high-pass filtered down-converted receive signal to a base-band signal.

15 (new). The method of claim 14, wherein the mixing step comprises:

mixing the receive signal with the local oscillator frequency at a first phase to provide an in-phase down-converted receive signal component; and

mixing the receive signal with the local oscillator frequency at a quadrature phase, relative to the first phase, to provide a quadrature-phase down-converted receive signal component;

wherein the down-converted receive signal comprises the in-phase down-converted receive signal component and the quadrature-phase down-converted receive signal component.